Abstract

A method and apparatus for controlling a DC-DC converter is provided that facilitates preventing a switching frequency from increasing under a light load condition even when the exciting inductance of the transformer in the DC-DC converter is high, thereby improving the conversion efficiency of the DC-DC converter. A mechanism is provided to change the switching frequency of the switching devices and to change the on-off ratio of the switching devices. The on-off ratio is changed in response to the output voltage and the switching frequency is changed in response to the input voltage supplied by the DC power supply. Alternatively, the switching frequency is changed while the on-off ratio is fixed at a certain value, and the on-off ratio is changed while the switching frequency is fixed at a predetermined value after the switching frequency has reached the predetermined value, thereby preventing the switching frequency from exceeding the predetermined value.